



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,399	04/07/2004	Gary G. Podrebarac	CDT 1788 CON	8465
1338	7590	03/08/2006	EXAMINER	
KENNETH H. JOHNSON P.O. BOX 630708 HOUSTON, TX 77263			GRIFFIN, WALTER DEAN	
			ART UNIT	PAPER NUMBER
			1764	
DATE MAILED: 03/08/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/820,399
Filing Date: April 07, 2004
Appellant(s): PODREBARAC ET AL.

MAILED

MAR 08 2006

GROUP 1700

Kenneth H. Johnson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 3, 2006 appealing from the Office action mailed August 2, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,597,476	HEARN ET AL.	1-1997
2003/0136706 A1	MCDANIEL ET AL.	7-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim 13 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Hearn et al. (US 5,597,476) in view of McDaniel et al. (US 2003/0136706).

The Hearn reference discloses a process for removing sulfur from naphtha by contacting the naphtha that contains diolefins in a distillation column reactor with a catalyst under conditions such that mercaptans are reacted with the diolefins to form sulfides. A heavy fraction is then subjected to hydrodesulfurization. See column 2, lines 30-62.

The Hearn reference does not disclose the separation of the naphtha into three fractions with the further hydrodesulfurization of the intermediate fraction.

The McDaniel reference discloses a process for removing sulfur from a hydrocarbon by first treating the hydrocarbon in a reaction zone to convert sulfur compounds followed by the separation of the treated hydrocarbon into three fractions with the treatment of the intermediate fraction in a hydrodesulfurization zone. See paragraphs 16, 17, 19, 23-40, 47-49, 52, 69, 70, and 77.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Hearn by separating the product from the distillation column reactor into three fractions and further treating the intermediate fraction as suggested by McDaniel because octane of the treated stream will be retained.

(10) Response to Argument

The appellants question whether the provisional application 60/334640 provides support for that which the examiner relies on in the McDaniel reference for the rejection. A copy of the

Art Unit: 1764

provisional application has been previously supplied to the appellants and is in the application file. A comparison between the provisional application and the Patent Application Publication 2003/0136706 A1 clearly shows that the publication is entitled to an effective date of the filing of the provisional application and is prior art.

The argument that the stream containing the thiophenes in the Hearn process is the bottom stream and that there is no suggestion that the thiophenes be anywhere else is not persuasive because the rejection is based on a combination of references and the examiner maintains that the McDaniel reference provides the suggestion of separating an intermediate stream containing thiophenes and then treating this intermediate stream.

The argument that the McDaniel reference discloses a process that treats essentially the same bottom fraction as Hearn is not persuasive. It is true that the process McDaniel treats a bottom stream but the process also includes the treatment of an intermediate stream.

The argument that there would be no incentive to split the product of Hearn into three streams based on the McDaniel reference is not persuasive. The McDaniel reference discloses in paragraph [0017] that separately treating an intermediate stream results in the retention of octane number. The retention of octane number is advantageous in the production of gasoline.

The argument that TABLE V in the McDaniel reference is deceptive and that in the McDaniel process, the sulfur would not have been in the intermediate stream is not persuasive. The discussion of TABLE V in paragraph [0128] perhaps indicates that the light fraction would not contain sulfur if the fractionation were ideal but does not suggest that both the light and intermediate fraction would not contain sulfur. In fact, in paragraph [0017], the intermediate stream is disclosed as containing sulfur-containing organic impurities.

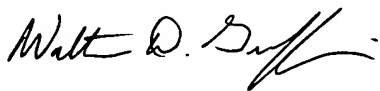
Art Unit: 1764

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,




Walter D. Griffin


Conferees:

Glenn Caldarola

Tim Meeks



Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700



TIMOTHY MEEKS
SUPERVISORY PATENT EXAMINER